

to probably pressure on the portal vein by a myeloid tumor. The ascites disappeared which he attributes to absorption of the leukemia and consequent relief from pressure.

A Method by Which Remedial Agents may be Mingled with the Spinal Fluid.—BALLANCE (*Lancet*, 1914, clxxxvi, 1525) describes the method in detail by which he introduced salvarsanized serum on five occasions into the lateral ventricle; twice in two patients and once in a third patient. No ill effects have occurred from the injection of the serum but Ballance says that only a large experience could justify a claim that this method would cure or arrest cerebral or spinal disease, as typified in general paresis or tabes.

The Intrathecal Injection of Salvarsanized Serum.—SPENCER (*Lancet*, 1914, clxxxvi, 1531) concludes that the intrathecal injection of salvarsanized serum offers a hopeful method of treating and arresting the progress of tabes and other parenchymatous diseases of the spinal cord. Before its introduction these cases resisted all efforts and finally drifted into the asylums and work-houses. A cure of the lightning pains can almost definitely be promised. The injections, if carried out with especial aseptic care and technique do not endanger the patient's life. There is a great future before this treatment when further work has been done in perfecting it. The cure of a condition, which has previously baffled all efforts, merely because the pathology has not been fully understood, is now possible by working on definite scientific lines.

The Intrameningeal Treatment of Tabes and Cerebrospinal Syphilis.—BOGGS and SNOWDEN (*Arch. Int. Med.*, 1914, xiii, 970) reports eight cases of cerebrospinal syphilis treated by intrameningeal injections of salvarsanized serum. The technique used by the authors differed in one important point from that recommended by Swift and Ellis. They injected undiluted serum in amounts of from 25 to 35 c.c. after preliminary intravenous injection of 0.6 gm. of salvarsan. Thus the average single dose was about double that given by Swift and Ellis. The authors state that, from the results in their series of cases, it is evident that the intraspinal method is a step forward in the treatment of tabes and cerebrospinal syphilis. The patients were uniformly relieved from pain, and as far as locomotion was concerned there was a slow but definite improvement, in some instances amounting almost to restitution to normal. In this respect their cases seemed to do better than those of Swift and Ellis, perhaps on account of the larger doses of serum. The psychic effect of the treatment was also marked. The patients became encouraged by the quick relief of pain and the first improvement in the control of motion and were faithful in their efforts to use the legs and practice walking, stair climbing, etc. The nutrition also rapidly improved under these stimuli. The effect of the treatment on the cerebrospinal fluid was very striking. The cell count first fell to normal, the Wassermann reaction becoming negative some time after the cells were reduced. The Noguchi reaction seemed of less value as an indication of improvement, since such large amounts of globulin were injected into the spinal canal. The authors

observed that the Noguchi reactions were positive, in most instances, after the cell count and Wassermann indicated a normal fluid. In the cases treated with the undiluted serum the reactions were sometimes more severe than those reported by Swift and Ellis—pain in the abdomen, legs and rectum, with occasional nausea and vomiting or dizziness, and in a few instances a little fever. The do not feel, however, that these constitute any contra-indication to the larger doses of whole serum, especially in the light of the apparently greater benefit to the patient.

PEDIATRICS

UNDER THE CHARGE OF

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Salvarsan and Neosalvarsan in Hereditary Syphilis.—J. L. BUNCH (*Brit. Jour. Child Dis.*, 1914, xi, 297) shows that the arsenical preparations have not displaced mercury in the treatment of all cases of congenital syphilis. But where treatment has been omitted until the case is almost hopeless, or where the symptoms are exceptionally acute or fail to respond to mercurial treatment, quite brilliant results can be obtained by the use of arseno-benzol or its derivative. The mortality of congenital syphilitics is very high. Of 1700 syphilitic pregnancies 1535 resulted either in abortion or death before the end of the first year. This shows that a more successful method of treatment than by mercury is necessary in a large number of these cases. Bunch gives the results of salvarsan treatment by a large number of investigators and they show an improvement over the mercury treatment alone. Neosalvarsan is more simple of preparation than salvarsan, but several important points are brought out in its application. The solution must be injected as soon as prepared. A sterile 0.4 per cent. saline solution made of freshly distilled water is best. The dose administered should be 0.15 gram. per kgrm. of body weight. The median, basilic or external jugular veins may be used for the intravenous method in young children. It is wise to start with small doses in all cases. Absolute immobilization of the patient is one of the great difficulties. It is unwise to inject neosalvarsan into patients with marked cerebral involvement or kidney disease. The drug is especially valuable in cases with skin lesions. In babies it is rarely necessary to use more than two or three injections, if more are necessary the intramuscular method should be used. The Wassermann reaction is of little use as a guide, usually remaining positive in spite of treatment while active symptoms are present. For rapidity of action and power of healing up syphilitic symptoms nothing superior has up to the present been discovered.

Auricular Flutter in Acute Rheumatic Carditis.—G. A. SUTHERLAND (*Brit. Jour. Child. Dis.*, 1914, xi, 337) describes an abnormal rhythm of the auricles in acute rheumatic carditis. Prognosis in this